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10/511707 DT01 Rec'd PCT/PTC 1 5 OCT 2004

Docket No.: 09857/0201259-US0

(PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Tsuyoshi Shimoboji

Application No.: Not Yet Assigned

Confirmation No.: N/A

Filed: Concurrently Herewith

Art Unit: N/A

For:

HYALURONIC ACID MODIFICATION

PRODUCT

Examiner: Not Yet Assigned

## **INFORMATION DISCLOSURE STATEMENT (IDS)**

MS PCT **Commissioner for Patents** P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith.

A summary/abstract translation of the non-English language documents is enclosed.

A copy of each document on the PTO/SB/08 is attached.

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Citation Nos. BB-BG, BI and CA are not in the English language. In accordance with 1.98(c), Applicant states:

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The requirement for concise explanation of relevance of Citation Nos. BB-BG, BI and CA is satisfied by the attached translation of the abstracts (see MPEP § 609 A(3)). Also enclosed is an English language copy of a Search Report from a foreign patent office, issued in a counterpart application.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Our check in the amount of \$1,044.00 covering the fee set forth in 37 CFR 1.21(h), 1.492(a)(5), and 1.492(c) is enclosed. The Commissioner is authorized to charge any deficiency of up to \$300.00 or credit any excess in this fee to Deposit Account No. 04-0100.

Dated: October 15, 2004

Respectfully submitted.

hris T. Mizumoto

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PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0551-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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		-		Application Number	Not Yet Assigned 5 1 1 /	0	
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STATEMENT BY APPLICANT				First Named Inventor	Tsuyoshi Shimoboji		
				Art Unit	N/A		
(Use as many she ets as necessary)			necessary)	Examiner Name	Not Yet Assigned		
Sheet	1	of	2	Attorney Docket Number	09857/0201259-US0		

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2</sup> ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code³-Number⁴-Kind Code⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
	BA	WO-99/18142-A1	04-15-1999	Macromed, Inc.				
	ВВ	JP-2002-256075	09-11-2002	Centmed Inc.				
	ВС	JP-04-261664	09-17-1992	Biomatrix Inc.		$\overline{V}$		
	BD	JP-05-262882	10-12-1993	W R Grace & Co.		$ \overline{A} $		
	BE	JP-09-227329	09-02-1997	M & M Kenkyusho KK		<b>V</b>		
	BF	JP-11-169703	06-29-1999	M & M Kenkyusho KK		1		
	BG	WO-95/15152-A1	06-08-1995	Ogita				
	ВН	WO-97/24430-A1	07-10-1997	Colgate-Palmolive Company				
	ВІ	WO-00/27405-A1	05-18-2000	Denki Kagaku Kogyo Kabushiki Kaisha				

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, jour nal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>		
•	CA	"Soshiki Kogaku ni Okeru Jinko Saibo-gai Matrix Sekkai: Kan'on-sei Hyaluronic Acid no Gosei to Kozoka' (Artificial Extracellular Matrix Design in Tissue Engineering: Synthesis of Thermoresponsive Hyaluronic Acid and Its Supramolecular Organization)" by OYA et al., THE JAPANESE JOURNAL OF ARTIFICIAL ORGANS (2000), 29(2), pp. 446-451.	1		
	СВ	Patent Abstracts of Japan for JP2002-256075 published on September 11, 2002.			
	CC	Patent Abstracts of Japan for JP04-261664 published on September 17, 1992.			
	CD	"Injectable Hyaluronic Acid Gel for Soft Tissue Augmentation - A Clinical and Histological Study" by DURANTI et al., AMERICAN SOCIETY FOR DERMATOLOGIC SURGERY, INC., 1998, pp.1317-1325.			
	CE	Patent Abstracts of Japan for JP05-262882 published on October 12, 1993.			
	CF	Patent Abstract of Japan for JP09-227329 published on September 2, 1997.			
	CG	Patent Abstracts of Japan for JP11-169703 published on June 29, 1999.			
	СН	"Temperature-responsive gels and thermogelling polymer matrices for protein and peptide delivery" by BROMBERG et al., ADVANCED DRUG DELIVERY REVIEWS 31, 1998, pp. 197-221.			
	CI	"A Retention Test after Single Intra-articular Administration of High Molecular Weight Sodium Hyaluronate (NRD101) into the Rabbit Knee" by UMEDA et al., JAPAN PHARMACOLOGY THERAPEUTICS, Vol. 22, Supplement, March 1994, pp. 387(S-779)-393(S-785).			
	CJ	"Thermoresponsive Artificial Extracellular Matrix for Tissue Engineering: Hyaluronic Acid			
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Considered



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11	NFORMATION	I DI	SCLOSURE	Filing Date	Concurrently Herewith	
STATEMENT BY APPLICANT				First Named Inventor	Tsuyoshi Shimoboji	
				Art Unit	N/A	
(Use as many sheets as necessary)				Examiner Name	Not Yet Assigned	
Sheet	2	of	2	Attorney Docket Number	09857/0201259-US0	

	Bioconjugated with Poly( <i>N</i> -isopropylacrylamide) Grafts" by OHYA et al., BIOMACROMOLECULES 2001, 2, pp. 856-863.	
CK	"Temperature-responsive and degradable hyaluronic acid/Pluronic composite hydrogels for controlled release of human growth hormone" by KIM et al., JOURNAL OF CONTROLLED RELEASE 80 (2002) pp.69-77.	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.